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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/051,180
Filing Date	January 22, 2002
In re Application of:	Mark A. FELKEY et al.
Group Art Unit	2154
Examiner Name	Martin, N.
Customer NO.	25537
Total Number of Pages in This Submission: 32	Client Docket Number: WMA01004

ENCLOSURES ***(check all that apply)***

☒ Fee Transmittal Form	☐ Assignment Papers *(for an Application)*	☐ After Allowance Communication to Group
☐ Fee Attached	☐ Drawing(s)	☐ Appeal Communication to Board of Appeals and Interferences
☐ Amendment / Response	☐ Licensing-related Papers	☒ Appeal Communication to Group *(Appeal Notice, Brief, Reply Brief)*
☐ After Final	☐ Petition Routing Slip (PTO/SB/69) and Accompanying Petition	☐ Proprietary Information
☐ Affidavits/declaration(s)	☐ To Convert a Provisional Application	☐ Status Letter
☐ Extension of Time Request	☐ Power of Attorney, Revocation Change of Correspondence Address	☐ Additional Enclosure(s) *(please identify below):*
☐ Express Abandonment Request	☐ Terminal Disclaimer	
☐ Information Disclosure Statement	☐ Small Entity Statement	
☐ Certified Copy of Priority Document(s)	☐ Request of Refund	
☐ Response to Missing Parts/ Incomplete Application	Remarks	
☐ Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	DITTHAVONG & CARLSON, P.C. Phouphanomketh Ditthavong, Reg. No. 44658
Signature	
Date	February 13, 2006

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, VA 22313-1450 on this date:

Type or printed name	Linda V. Wiley		
Signature		Date	February 13, 2006

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OIPE IAP100 FEB 16 2006 PATENT & TRADEMARK OFFICE

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FEE TRANSMITTAL
For FY 2006

☐ Applicant Claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 500.00

Complete if Known	
Application Number	10/051,180
Filing Date	January 22, 2002
First Named Inventor	Felkey, et al.
Examiner Name	Martin, N.
Art Unit	2154
Customer No.	25537
Attorney Docket No.	WMA01004

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):_____

☒ Deposit Account Deposit Account Number: 07-2347 Deposit Account Name: Verizon
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)
☒ Charge fee(s) indicated below ☐ Charges fee(s) indicated below, **except for the filing fee**
☐ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☐ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims		Extra Claims		Fee ($)		Fee Paid ($)
40	- 40 =	0	x	$50.00	=	$ 0.00

HP = highest number of total claims paid for, if greater than 20

Multiple Dependent Claims: Fee ($) $360.00 Fee Paid ($) _____

Indep. Claims		Extra Claims		Fee ($)		Fee Paid ($)
3	- 3 or HP =	0	x	$200.00	=	$ 0.00

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41 (a)(1)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof		Fee ($)		Fee Paid ($)
0	- 100 =	0	/ 50 =	0	(round up to a whole number) x	$250.00	=	$ 0.00

4. OTHER FEE(S)

Non-English Specification, $130 fee (no small entity discount)
Other: Filing a brief in support of an appeal

Fees Paid ($) $500.00

SUBMITTED BY

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OIPE FEB 16 2006 PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	Mark A. FELKEY et al.	Conf. No.:	9669
Application No.:	10/051,180	Group Art Unit:	2154
Filed:	January 22, 2002	Examiner:	Martin, N.
Customer No.:	25537		
Attorney Docket:	WMA01004		
Client Docket:	09710-1124		

For: METHOD AND SYSTEM FOR PROVIDING SOFTWARE INTEGRATION FOR A TELECOMMUNICATIONS SERVICES ON-LINE PROCUREMENT SYSTEM

APPEAL BRIEF

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in support of the Notice of Appeal dated December 13, 2005.

I. REAL PARTY IN INTEREST

MCI, Inc. is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

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III. STATUS OF THE CLAIMS

Claims 1-40 are pending in this appeal. No claim is allowed. This appeal is therefore taken from the final rejection of claims 1-40 on August 10, 2005.

IV. STATUS OF AMENDMENTS

No amendment to the claims has been filed since the final rejection of claims 1-40 on August 10, 2005.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention relates to providing software integration for telecommunications offerings (e.g., telecommunications products and/or services) on-line procurement. (*See, e.g.*, specification, ¶ 2)

From the perspective of the customers of telecommunication services, the interaction between them and the customer representatives have been inefficient and frustrating. Because of the emergence of the many, and often perplexing, telecommunication services, the experience that the customers undergo when procuring services is far from user friendly. Further, customers do not enjoy dialing into a call center to wait in queue for a customer representative to tend to them, with no guarantees that the customer representative can adequately service their needs.

Service providers, therefore, have sought to provide a self-service on-line system through the use of the World Wide Web (WWW). However, ineffective user interfaces and non-integrated systems have introduced the same, if not greater, level of frustration than interacting with a live human. In particular, in light of the sophistication of modern telecommunication services, a live person may be required to intercede in the procurement process.

Based on the foregoing, there is a clear need for improved approaches for servicing customers via an on-line system to procure telecommunications services. There is also a need to enhance the efficiency of provisioning telecommunications services for the customers. There is a further need to cater to customers of varying level of sophistication, such that customers who require greater assistance are given the necessary attention.

Based on the need to enhance the customer experience in procuring telecommunication services, an approach for implementing an on-line system that provides a user-friendly and efficient mechanism to acquire services from a service provider is highly desirable. (*See, e.g.,* specification, ¶¶ 3-6)

The present invention addresses the above stated and other needs by providing an on-line system that offers an effective mechanism to efficiently procure telecommunication services. The system provides a new customer experience for pre-sale, order processing, and post-sale support. For pre-sale services, a prospective customer links to the site of, for example, a proprietary telecommunications service provider (or directly at a site promoting itself) and are presented with product materials and tools. Once the prospective customer has determined the services appropriate to his/her business and the system has qualified them, they may enter a Shopping Cart/Service Ordering section of the site, select their services and click on, for example, an "Order Now" button to proceed. Afterwards, a new customer may then enter either the site (or other on-line applications, such as Interact, etc.) to check order status, manage existing services, place additional orders, pay on-line, etc. (*See, e.g.,* specification, ¶ 7)

According to one aspect of the present invention there is provided a system for providing software integration for telecommunications offerings on-line procurement, including a first layer configured to receive at least one of a request and a user action from a web server; and a second

layer coupled to the first layer and configured to perform at least one of order management, online ordering and user management functions. At least one of the first layer and the second layer includes software objects extended to support procurement of the telecommunications offerings on-line and custom software objects created to support procuring of the telecommunications offerings on-line. (*See, e.g.,* specification, ¶ 8, claim 1)

According to another aspect of the present invention there is provided a method for providing software integration for telecommunications offerings on-line procurement, including receiving at least one of a request and a user action from a web server in a first layer; performing at least one of order management, online ordering and user management functions in a second layer; extending software objects in at least one of the first and second layers to support procuring of the telecommunications offerings on-line; and creating custom software objects in at least one of the first and second layers to support the procurement of the telecommunications offerings on-line. (*See, e.g.,* specification, ¶ 9, claim 20)

According to another aspect of the present invention there is provided a system for providing software integration for telecommunications offerings on-line procurement, including means for receiving at least one of a request and a user action from a web server in a first layer; means for performing at least one of order management, online ordering and user management functions in a second layer; means for extending software objects in at least one of the first and second layers to support procuring of the telecommunications offerings on-line; and means for creating custom software objects in at least one of the first and second layers to support the procurement of the telecommunications offerings on-line. (*See, e.g.,* specification, ¶ 10, claim 40)

Figure 4 is a flowchart illustrating a flow for procuring telecommunications products and/or services on-line, according to the present invention. In Figure 4, at step 402, the customer 302, 304 or 306 is pre-qualified and orders telecommunications products and/or services via the customer GUI. At step 404, technical review, validation and submission to order entry are performed by a service coordinator (e.g., customer service personnel 314, swivel-chair operators 316, etc.). At step 406, order entry for the telecommunications products and/or services desired by the customer 302, 304 or 306 is performed by the service coordinator. At step 408, order tracking is performed by the service coordinator, completing the flow for procuring telecommunications products and/or services, according to the present invention.

Accordingly, the flow for procuring telecommunications products and/or services, according to the present invention, does not involve numerous personnel 108 or time-consuming processing steps 202-210, in order to procure telecommunications products and/or services for a customer, as compared to the flow of Figures 1 and 2. Thus, the present invention addresses the noted problems with flow for procuring telecommunications products and/or services. (*See, e.g.,* specification, ¶¶ 41-42)

Figure 5 is a top level block diagram illustrating a logical architecture employed in the system 310 for providing software integration for a telecommunications services on-line procurement system, according to the present invention. In Figure 5, the logical architecture includes a web tier 502, an application tier 504, a database tier 506 and a service availability tool (SAT) 508. The application tier 504 communicates with the database tier 506 using, for example, Java DataBase Connectivity (JDBC). The application tier 504 communicates with the SAT 508 using, for example Internet Inter-ORB Protocol (IIOP). (*See, e.g.,* specification, ¶ 44, claims 1, 20, 40)

The web tier 502 is responsible for delivering web content 512 (e.g., HyperText Markup Language (HTML) pages, static content, images, Javascript scripts and cascading style sheets, etc) to the client machines 302a, 304a and 306a and 314a and 316a of Figure 3. A customer graphical user interface (GUI) is provided for the client machines 302a, 304a and 306a over the communications network 308. (*See, e.g.,* specification, ¶ 45, claims 1, 20, 40)

The client machines 302a, 304a and 306a and 314a and 316a running a web browser (e.g., Internet Explorer, Netscape, etc.) and via the respective GUIs connect requested web pages and images from the web site via, for example, HyperText Transport Protocol (HTTP) and HyperText Transport Protocol Secure (HTTPS). Although lower layers generate the system's HTML pages, the web tier 502 manages the building blocks of the HTML pages (e.g., the content 512, etc.). The HTTP and HTTPS requests are passed to a web server 510. The web server 510 serves up requests that it can fulfill and forwards user actions and HTML requests to a presentation tier 514. (*See, e.g.,* specification, ¶ 47)

The application tier 504 includes the presentation tier 514 framework (e.g., Cygent's presentation tier framework, etc.). Functionality from the presentation tier 514 framework (e.g., Cygent's Small Business Portal, etc.) is leveraged to build a customer portal 520. This is achieved by reusing and/or configuring the existing JavaServer Pages (JSPs) and objects including transition and display policies of the presentation tier framework 514. (*See, e.g.,* specification, ¶ 48, claims 1, 20, 40)

The application tier 504 includes a business and integration tier 516 (e.g., Cygent's Business tier and Integration tier, etc.). The business and integration tier 516 is a home for various components, such as activity and domain objects of three functional areas included therein: order management 522, online ordering 524 and user management 526. In Figure 5,

communications messaging interfaces (CMIs) 528 and handlers 530 are also shown. The business and integration tier 516 communicate with the presentation tier 514 using, for example, Remote Method Invocation (RMI). (*See, e.g.,* specification, ¶ 50, claims 1, 20, 40)

Domain objects to handle the ordering functionality (e.g., Cygent's ordering functionality domain objects, etc.) were extended and a custom CMI and pricing adapter as an extension to a pricing scheme (e.g., Cygent's pricing scheme, etc.) were designed. Activity objects also referred to as managers or controllers (e.g., Cygent managers or controllers, etc.) are used to coordinate the ordering activities and functions. Business rules (e.g., Cygent, etc.) to constrain the ordering activities as needed are also employed. Existing database 532 tables (e.g., Cygent, etc.) are used to persist online ordering data. Additional tables are designed to extend such schema. Such tables are also mapped to display objects and domain objects (e.g., using a TopLink for Java tool, etc.). (*See, e.g.,* specification, ¶ 51, claims 1-5, 20-24, 40)

Pre-qualifying a customer 302, 304 or 306 for products and/or services employs an application to make a call out to the SAT 508, which is, for example, Common Object Request Broker Architecture (CORBA) based. A custom CMI and adapter was designed to handle that function. (*See, e.g.,* specification, ¶ 52, claims 3, 5)

Generally, the Cygent framework includes a presentation tier, which is responsible for production of web pages and URL navigation, the business tier, which is responsible for exercising the business rules and transactions and the integration tier, which is responsible for facilitating access to persisted data as well as interfacing with external systems or applications. (*See, e.g.,* specification, ¶ 54)

The presentation tier includes a web controller, which is a Java Servlet acting as a traffic cop that is responsible for routing requests to the appropriate Java server page (JSP) files or

transition policy objects. The transition policies are Java objects, which provide navigation and validation logic. The JSPs are essentially HTML files with embedded Java code for display of dynamic content. A JSP tag library is used to facilitate the use of display objects and display policies that can handle process logic to display a page. The display objects are read-only lightweight objects that shadow domain objects. In that respect, a display object may represent a subset or all of the domain objects attributes. Furthermore, a display object may be mapped to one or more domain objects in order to reduce network traffic and object distribution. Once used, the display objects are discarded. (*See, e.g.,* specification, ¶ 55, claims 2-5, 21-24)

The business tier is a core of the smart component server. It includes two types of component groups: activity smart components and service smart components. The activity smart components are implemented as stateless session beans using the WebLogic Enterprise JavaBeans (EJB) Server. These components are essentially business rule objects (i.e., controllers), which manipulate and control the domain objects. The service smart components provide services that the activity smart components employ, such as logging, sequencing and data cursoring. The business tier also is responsible for user authentication functions.

This integration tier acts as a gateway to the data store and to external interfaces to external applications. The integration tier provides access to data stores via a data access service, which employs TopLink for Java and is the object relational mapping tool to facilitate the persistence. In addition, the data access service provides serializable Java objects, known as value objects, which can be either display objects or domain objects that are passed by value to one of the tiers above. These core objects address Shop, Offer, Quote, Order, Customer, Sales, Business Rules, Interactions, Profiles, Bill Presentment, Payment, Trouble Ticket and Notice

management specifically for telecommunications product transactions. Both the presentation and the business tiers have direct access to the integration tier.

Access to external interfaces is facilitated via communications messaging interfaces (CMIs) of an interconnect service, CMI policies and custom adapters. CMIs provide a mechanism that allows the framework to loosely couple the core functionality with custom components. (*See, e.g.,* specification, ¶¶ 56-58)

The objects that Cygent provides in its Small Business Portal and the Smart Component Server are general-purpose. The Cygent objects employed in the present invention include, for example: (i) Vendor Products objects including, for example, Vendors, Vendor products, Disclosures, Parameter definitions, Parameter enumerations, Parameter groups, Service level agreements (SLAs), Interaction models, CMI policies, etc.; (ii) Offers objects including, for example, Offers, Offer collections, Menus, Display attributes, Determinants, Determinant sequences, Determinants, Determinant items, etc.; and (iii) Pricing Objects including, for example, Price group supported, Price groups, Contexts, Price Arrangements, Prices, Criteria, Unit Prices, etc.

According to the present invention, the Cygent objects are extended and new objects are created, for example, to configure the back office portal 518 and the customer portal 520 of the presentation tier 514, the order management 522, the online ordering 524 and the user management 563b of the business and integration tiers 516, etc., to support the specific context (e.g., product lines, etc.) of the present invention. (*See, e.g.,* specification, ¶¶ 59-60, claims 1, 20, 40)

For example, in the Cygent model, an Offer object simply contains information about the general price of a vendor product. However, for the web site's product collection (e.g., local

telephony, switched and dedicated long distance telephony, switched and dedicated toll free telephony, calling cards, cellular/Personal Communications Services (PCS), paging, dial-up Internet, conferencing, integrated messaging, Digital Subscriber Line (DSL), dedicated Internet, private line, frame relay, etc., etc.) the Offer object is extended (e.g., the extended object is identified by appending "Onol" thereto) to carry additional information for such product collection. Exemplary extensions to the Cygent Offer object are described below.

An OnolOffer object may include, for example, a new attribute that tells the web site whether additional pricing for an offer, beyond the standard Cygent display, may be shown. This enables the system to, for example, display a button that, when pressed, takes the customer 302, 304 or 306 to a page displaying such pricing information.

In addition, the OnolOffer object may include a new attribute that, for example, holds the number of T-1 trunks, circuits, etc., the underlying Cygent VendorProduct object employs. This enables the web site, for example, to keep track of how many T-1 trunks have been configured and to display this and corollary facts (e.g., how many trunks still require to be configured, the percentage of trunks already configured, etc.) to a user (e.g., the customer service 314 personnel, the swivel chair operator 316 personnel, etc.).

Further, the OnolOffer object may include, for example, a new attribute that holds the Estimated Monthly Usage (EMU) for the Cygent Offer object. From this figure, the web site, for example, can calculate the total EMU for an order by adding the EMU figures for each Offer object in an order.

The process of extension in the Java Object realm (e.g., the application tier 504, etc.) is paralleled by extensions in the database realm (e.g., in the database tier 506, etc.). Accordingly, a new "Onol" table, linked to a Cygent Offer table by primary key, OID (Object Identifier), etc., is

created, according to the present invention. This table contains, for example, the information for the new attributes of the extended Cygent Object, the OnolOffer object. (*See, e.g.*, specification, ¶¶ 61-65, claims 1, 20, 40)

The Cygent model also may be extended, for example, to configure new Objects. In principle, this sort of extension is similar to the type described above. Examples of new objects that may be created include, for example, objects created to hold additional information displayed about OnolOffer objects. These include, for example, an OutboundInternationalRate object, which may include attributes corresponding to the web site country codes, switched rates, dedicated rates for the various countries indicated in the web site's Product and Pricing Matrix, etc.

As described above, the present invention includes customizations made to the Cygent framework, including, for example, the Smart Component Server and Small Business Portal. These customizations are intended to leverage Cygent's generic architecture to solve the specific business processes of the web site of the present invention. With respect to order management, this includes, for example, functionality involving orders in a post-submitted state. For example, this involves views of an order by customers 302, 304 or 306 and operators 314 and 316 alike, as well as move, change or disconnection (MCD) of orders and supplemental orders (Supps). The order management also includes other back office functionality, such as context-sensitive contact information, "web callback" forms, Help Center information, requests for inventory, etc. (*See, e.g.*, specification, ¶¶ 66-67)

The following description applies to custom software developed according to the present invention, for example, including Java Server Pages (JSPs), Java objects (e.g., such as transition policies, display policies, etc.), session bean control objects, domain objects, etc. Order

management, MCD/Supp, order tracking, and order submission functionality is supported using, for example, a common set of domain classes. These classes, where possible, leverage Cygent's class framework. This results in a smaller set of custom classes to be implemented and also enhances the robustness and maintainability of the web site. Figures 5b-5g describe exemplary custom classes, according to the present invention. A Rose model is used to display the classes in their UML format. The Cygent classes are noted as such. (*See, e.g.,* specification, ¶ 68, claims 3, 5, 22, 24, *see also,* specification, ¶¶ 73, 75-77, 84-85, 93, 103, 105, 108-116, 120-125)

Figure 6a is a Rose model used for illustrating the Order Domain, according to the present invention. In Figure 6a, the Order Domain Model represents those classes that extend the Cygent Order classes and support functionality employed by the web site that is not provided by the Cygent Order classes. For example, the OnolOrder class exists in order to hold that information that back office processes employ (e.g., who has been assigned an order, who made the assignment, when was it assigned, etc.). (*See, e.g.,* specification, ¶ 69, claims 1, 20, 40)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-40 are obvious under 35 U.S.C. § 103(a) based on *Crawford* (U.S. 6,014,651) in view of *Elsbree* (U.S. 6,834,388).

VII. ARGUMENT

A. CLAIMS 1-40 ARE NOT OBVIOUS OVER *CRAWFORD* IN VIEW OF *ELSBREE.*

Well-settled case law holds that the words of a claim must be read as they would be interpreted by those of ordinary skill in the art. *In re Baker Hughes Inc.,* 215 F.3d 1297, 55 USPQ2d 1149 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed.

Cir. 1997); M.P.E.P. 2111.01. "Although the PTO must give claims their broadest reasonable interpretation, this interpretation must be consistent with the one that those skilled in the art would reach." *In re Cortright,* 165 F.3d 1353, 1369, 49 USPQ2d 1464, 1465 (Fed. Cir. 1999).

The Administrative Procedures Act (APA) mandates the Patent Office to make the necessary findings and provide an administrative record showing the evidence on which the findings are based, accompanied by the reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000). In particular, the Patent Office must articulate and place on the record the "common knowledge" used to negate patentability. *In re Zurko, id.*; *In re Lee*, 277 F.3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002).

The rejection of claims 1-40 is respectfully traversed because *Crawford* and *Elsbree* neither teach nor suggest the features of the claims.

1. **Independent claims 1, 20, and 40 are not obvious over *Crawford* in view of *Elsbree*.**

More particularly, independent claims 1, 20, and 40 each recite **software objects extended "from general-purpose software objects"** in "the **web tier** or the **application tier**" to support **procurement of "the telecommunications offerings on-line."**

For example, independent claim 1 recites, "A system for providing software integration for **on-line procurement of telecommunications offerings**, comprising: **a web tier** configured to receive a request or a user action from a web server; and **an application tier coupled to the web tier** and configured to perform order management, online ordering or user management functions, wherein **the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications**

offerings on-line and custom software objects created to support procuring of the telecommunications offerings on-line." Independent claim 20 recites, "A method for providing software integration for **on-line procurement of telecommunications offerings**, comprising: receiving a request or a user action from a web server **in a web tier**; performing order management, online ordering or user management functions **in an application tier**; **extending software objects from general-purpose software objects** in the web tier or the application tier **to support procuring of the telecommunications offerings on-line**; and creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line." Independent claim 40 recites, "A system for providing software integration for **on-line procurement of telecommunications offerings**, comprising: means for receiving a request or a user action from a web server **in a web tier**; means for performing order management, online ordering or user management functions **in an application tier**; means for **extending software objects from general-purpose software objects** in the web tier or the application tier **to support procuring of the telecommunications offerings on-line**; and means for creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line."

In stark contrast, *Crawford* (per "FIELD OF THE INVENTION", col. 1: 10-19) is directed to providing an on-line service that supplies **automated information processing services** to computer users for a fee. The automated information processing services include, for example, an on-line service that allows remote computer users to connect on-line to computer devices (e.g., "virtual" disks) and access them to do such things as run computer software from them. The Examiner (Office Action dated August 10, 2005, p. 2) contends that the "web tier"

recited by claim 1 is taught by *Crawford* at col. 27: 48-54. However, the cited portion of *Crawford* states:

> Every time a drive is mounted on one system (including virtual disks mounted on the replica server 160), the drive needs to be configured (mounted) as a remote disk on the other computer. The Replica Server On-line Session Control process sends and receives configuration requests to cause drive mounts and dismounts on both computers.

However, this cited portion of *Crawford* makes no suggestion of any "web tier" as recited by claim 1. The Examiner (Office Action dated August 10, 2005, p. 3) further contends that the "application tier coupled to the web tier" recited by claim 1 is taught by *Crawford* at col. 16: 57-65 and col. 46: 62 – col. 47: 14. However, at col. 16: 57 - col. 17: 5, *Crawford* states:

> FIG. 4 shows that data link 150 may comprise up to three different "layers" of connection: the first layer or sub-link connects host computer 104 to switching station 124a; the second "layer" connects switching station 124a to switching station 124b; and the third "layer" connects switching station 124b to a customer computer 50. A customer may connect the on-line service system 100 by many different methods. These methods may evolve as advances in telecommunications become available. For example, each of the various layers may comprise any of ISDN link, LAN/WAN connect, a "front end controller," another computer, a telephone company connection, a direct connection, a fiber optic link, a cable television link, cellular link, a satellite link, a radio frequency link and/or a PDN connection. The three layers can also comprise varying cable mediums and software bridges, gateways, routers and/or emulations.

This cited portion of *Crawford* makes no suggestion of any "application tier coupled to the web tier" as recited by claim 1. At col. 46: 62 – col. 47: 14, *Crawford* discusses host computer 104 beginning a host task request 912 to manage host based requests on behalf of customers, which may be signaled or responded to by generating requests to replica computer 160. Once all of these tasks are in place, host computer 104 enters a loop where it is constantly checking and waiting for connects from customer computers 50 and off-line replica computer 160 in order to begin on-line sessions and/or off-line replica computer 160 sessions.

The Examiner (Office Action dated August 10, 2005, p. 3) then apparently contends that "software objects to support procurement of the telecommunications offerings on-line" is taught by *Crawford* at col. 16: 57 - col. 17: 5, col. 18: 16-22, and col. 19: 9-17. However, the additional portions of *Crawford* cited here merely refer to "virtual disk drives" by which a customer computer 50 can efficiently access remotely located computer storage by a data link 150 (col. 18: 29-34) In the Advisory Action dated November 10, 2005 (item 11, no. 2), the Examiner further states, "Crawford discloses a system for providing multiple services to customers [Figures 2; and col. 14, lines 43 – col 15, lines 62] which customers can do online purchase [Figure 8; col 28, lines 29-44; and col 30, lines 29-64]." However, the "services" discussed by *Crawford* at col. 14: 43 – col. 15: 62 appear to specifically involve accessing virtual disk drives. The "online purchase" referenced by the Examiner refers to an On-line Service Customer Signup Process. At col. 28: *Crawford* states (*emphasis added*):

> FIG. 8A offers an overview of on-line service control software **executed within the on-line service host processor.**
>
> Block 400 shows the On-line Service Customer Signup Process. **Access is provided by dialing a special charge telephone number (block 400A).** A message is displayed describing the services and charges for signup, and the amount of time left to exit before a signup charge is issued (block 400B). If the customer stays connected and responds to signup information, a user ID/password is assigned, software and control information is downloaded to the customer computer 50, and customer control information is stored on the host system 100 (block 400C). This control process can be performed by the on-line service computer 104 or the replica server computer 160. The latter is preferable because **the link to the signup computer can be performed with standard communications software.**

Thus, the customer signup process is implemented differently from the access to the virtual disk drive which the Examiner cites in the Office Action's discussion of the rejection with regard to the "web tier" and the "application tier" recited by claim 1. Thus, *Crawford* fails to

suggest or disclose any "application tier coupled to the web tier" or any type of "**on-line procurement of telecommunications offerings**" as recited by claim 1.

Elsbree fails to cure the deficiencies of *Crawford* in this regard. Although the Office Action fails to accurately track the recited language of claim 1, the Examiner (Office Action dated August 10, 2005, p. 3) apparently correctly acknowledges that *Crawford* does not teach "wherein the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications offerings on-line and custom software objects created to support procuring of the telecommunications offerings on-line" as recited by claim 1, but contends that this feature is taught by *Elsbree* at col. 6: 12-39.

However, *Elsbree* (per col. 1: 14-16) is directed to development, creation, and use of software for process control, specifically ActiveX controls that are OPC compliant. *Elsbree* (per col. 2: 1-8) is concerned with a software development toolkit to ease the task of connecting a computer and a machine to allow them to communicate according to a standard communication protocol for process control. The toolkit allows a user to produce the necessary real-time interactive control and communication software objects, such as ActiveX controls, that are used in connecting and interoperating the control computer and the machines. At col. 6: 12-39, *Elsbree* states:

> FIG. 3 depicts a schematic of the internal organization of the client-side of process control software objects which may be created pursuant to the invention. One or more real-time interactive control and communication software objects 40 are inserted into an application software object called a container 42. The container 42 is software which is designed to operate with objects which have interactive capabilities. In one embodiment, the real-time interactive control and communication software objects 40 are ActiveX control objects, and the container 42 is Microsoft Visual Basic. In other embodiments the container 42 may be Microsoft Internet Explorer which runs an HTML page, or ICONICS GraphWorX32, or Netscape Communicator which run an HTML page. Internet Explorer is a web browser manufactured by Microsoft Corporation, Netscape Communicator is a web browser manufactured by the Netscape Corporation, and

> GraphWorX32 is a software product of ICONICS Inc. used for Human/Machine Interfaces ("HMI"). A real-time interactive control and communication software object 40 may give rise to one or more exemplars of the Active X control, which are called instances 41. As is familiar to those of ordinary skill in the art, these instances 41 are embedded into the container 42. Embedding as used herein denotes particularly making the real-time interactive control and communication software object 40 functional as a control through the intermediation of the container application 42, and includes the possible utilization of one or more additional software files.

In the Advisory Action dated November 10, 2005 (item 11, no. 4), the Examiner further states, "Elsbree discloses software objects extended from general-purpose software objects [i.e. instance object] [col 6, lines 16-67; and col 10, lines 18-23]." However, these further cited portions of *Crawford* merely mentions that two dynamic link libraries are employed to complete the interconnection of the control object 40 to an OPC server (col. 6: 40-67) and mentions an object type GwxDisplay 230 that exposes methods for creating and getting existing instances of visible and dynamic objects.

There is no mention by *Elsbree* of any "application tier coupled to the web tier" or any type of "**on-line procurement of telecommunications offerings**" as recited by claim 1. Moreover, neither *Crawford* nor *Elsbree*, nor any combination thereof, discloses or suggests "the web tier or the application tier includes software objects extended from general-purpose software objects **to support procurement of the telecommunications offerings on-line**" as recited by claim 1.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 104 F.3d 1339, 41 USPQ2d 1451 (Fed .Cir. 1997); *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner is

required to provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner has failed to meet this burden.

Further, the Examiner (Office Action dated August 10, 2005, pp. 3-4) asserts, "It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Elsbree and Crawford because both deal with software integration for telecommunication services. Furthermore, the teachings of Elsbree to allow software objects from the general-purpose software objects to support procurement of the telecommunications offerings online would improve the functionality of Crawford's system by allowing the objects to carry additional information for product collection and distribution." This assertion by the Examiner has no technical merit, as neither reference has anything to do with "telecommunications services," much less any type of "**on-line procurement of telecommunications offerings,**" and furthermore, there is no apparent motivation or reasoning shown for *Crawford's* system to allow "objects to carry additional information for product collection and distribution" as asserted by the Examiner.

In the Advisory Action dated November 10, 2005 (item 11, no. 5), the Examiner modifies the supposed motivation to combine the references, stating, "it would have been obvious to combine the teaching of Crawford and Elsbree because Elsbree's teaching of instance objects would allow the system to reuse existing codes and dynamically create additional objects in a quicker and efficient manner," apparently relying on the Examiner's assertion of "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either

in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See in re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and in re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)." However, there is no need established by any portion of *Crawford* for reuse of "existing codes" or for dynamically creating "additional objects in a quicker and efficient manner" as urged by the Examiner.

Obviousness rejections require some evidence in the prior art of a teaching, motivation, or suggestion to combine and modify the prior art references. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 218 USPQ 769 (Fed. Cir. 1983). A prior art reference must be considered in its entirety including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

If a proposed modification would render the prior art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Therefore, the rejection should be reversed. For reasons similar to those discussed with regard to claim 1, the rejection of independent claims 20 and 40 should also be reversed.

2. Dependent claims 2, 4, 21, and 23 are not obvious over *Crawford* in view of *Elsbree*.

Dependent claims 2, 4, 21, and 23 are allowable for at least the same reasons as their respective independent claims, and are separately patentable on their own merits. For example, dependent claim 2 recites, "wherein the web tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects," which the Examiner (Office Action dated August 10, 2005, p. 4, item 10) contends is taught by *Crawford* at col. 16: 57 – col. 17: 5 and col. 35: 24-34. However, col. 16: 57 – col. 17: 5 of *Crawford* mentions that the "data link 150 may comprise up to three different "layers" of connection: the first layer or sub-link connects host computer 104 to switching station 124a; the second "layer" connects switching station 124a to switching station 124b; and the third "layer" connects switching station 124b to a customer computer 50," as discussed previously. At col. 35: 24-34, *Crawford* mentions allowing a customer to change a default configuration, permitting the customer computer 50 to access information in the on-line service control data table 501, and routine 506 updates the on-line service control data table 501, and then redirects the processor interrupts by loading new interrupt handlers into the processor memory 66 (col.35: 25-42), which has no apparent relevance to the data link "layers" of connection, nor to the "web tier" as recited by claim 2.

Dependent claim 4 recites, "wherein the application tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects." The Examiner (Office Action dated August 10, 2005, p. 4, item 12) cites the same portions of *Crawford* in its rejection of claim 4 as is used in the rejection of

claim 2. Appellants respectfully submit that independent claim 1, from which claims 2 and 4 depend, recites, "an application tier coupled to the web tier and configured to perform order management, online ordering or user management functions," which is clearly not disclosed or suggested by the portions of *Crawford* cited by the Examiner. Unless the patent otherwise provides, a claim term cannot be given a different meaning in the various claims of the same patent. *Georgia Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1331, 52 USPQ2d 1590, 1598 (Fed. Cir., Nov. 1, 1999); see also *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579, 34 USPQ2d 1673, 1679 (Fed. Cir. 1995) (holding that claim term found in different claims must be interpreted consistently); *Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627, 632, 3 USPQ2d 1109, 1113 (Fed. Cir. 1987) (holding that a term used in one claim had the same meaning in another claim).

Furthermore, as discussed previously, there is no apparent relevance of the cited customer change of a default configuration with the cited data link "layers" of connection, nor to the "application tier" as recited by claim 4.

Thus, the rejections of claims 2, 4, 21, and 23 should be reversed.

3. Dependent claims 3, 5, 22, and 24 are not obvious over *Crawford* in view of *Elsbree*.

Dependent claims 3, 5, 22, and 24 are allowable for at least the same reasons as their respective independent claims, and are separately patentable on their own merits. For example, dependent claim 3 recites, "wherein the web tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects," which the Examiner (Office Action dated August 10, 2005, p. 4, item 11) contends is taught by *Crawford* at col. 16: 57 – col. 17: 5 and col. 35: 24-34. However, col. 16: 57 – col. 17: 5 of *Crawford* mentions that the "data link 150 may comprise up to three different "layers" of

connection: the first layer or sub-link connects host computer 104 to switching station 124a; the second "layer" connects switching station 124a to switching station 124b; and the third "layer" connects switching station 124b to a customer computer 50," as discussed previously. At col. 35: 24-34, *Crawford* mentions allowing a customer to change a default configuration, permitting the customer computer 50 to access information in the on-line service control data table 501, and routine 506 updates the on-line service control data table 501, and then redirects the processor interrupts by loading new interrupt handlers into the processor memory 66 (col.35: 25-42), which has no apparent relevance to the data link "layers" of connection, nor to the "web tier" as recited by claim 3.

Dependent claim 5 recites, "wherein the application tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects." The Examiner (Office Action dated August 10, 2005, p. 4, item 13) cites the same portions of *Crawford* in its rejection of claim 5 as is used in the rejection of claim 3. Appellants respectfully submit that independent claim 1, from which claims 3 and 5 depend, recites, "an application tier coupled to the web tier and configured to perform order management, online ordering or user management functions," which is clearly not disclosed or suggested by the portions of *Crawford* cited by the Examiner. Furthermore, as discussed previously, there is no apparent relevance of the cited customer change of a default configuration with the cited data link "layers" of connection, nor to the "application tier" as recited by claim 5.

Thus, the rejections of claims 3, 5, 22, and 24 should be reversed.

4. Dependent claims 6-19 and 25-39 are not obvious over *Crawford* in view of *Elsbree*.

Dependent claims 6-19 and 25-39 are allowable for at least the same reasons as their respective independent claims, and are separately patentable on their own merits.

VIII. CONCLUSION AND PRAYER FOR RELIEF

For the foregoing reasons, Appellants request the Honorable Board to reverse each of the Examiner's rejections.

Respectfully Submitted,

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2/15/06
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IX. CLAIMS APPENDIX

1. (Previously Presented) A system for providing software integration for on-line procurement of telecommunications offerings, comprising:

a web tier configured to receive a request or a user action from a web server; and

an application tier coupled to the web tier and configured to perform order management, online ordering or user management functions,

wherein the web tier or the application tier includes software objects extended from general-purpose software objects to support procurement of the telecommunications offerings on-line and custom software objects created to support procuring of the telecommunications offerings on-line.

2. (Previously Presented) The system of claim 1, wherein the web tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.

3. (Previously Presented) The system of claim 1, wherein the web tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.

4. (Previously Presented) The system of claim 1, wherein the application tier includes reconfigured software objects that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.

5. (Previously Presented) The system of claim 1, wherein the application tier includes the custom software objects that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.

6. (Previously Presented) The system of claim 1, wherein the web tier includes a back office portal including the custom software objects and configured to provide to the web server

context-sensitive contact information, callback forms, help center information, or requests for inventory.

7. (Previously Presented) The system of claim 1, wherein the web tier includes a customer portal including the extended software objects and configured to provide to the web server customer order information, customer support information, or customer order status information, wherein the extended software objects include software objects extended from software objects included in a generic architecture, extended to support ordering telecommunications services or products.

8. (Previously Presented) The system of claim 1, wherein the application tier includes an order management function for providing to the web tier the context-sensitive contact information, callback forms, help center information, or requests for inventory.

9. (Previously Presented) The system of claim 1, wherein the application tier includes an online ordering function for providing online ordering functionality to the web tier.

10. (Previously Presented) The system of claim 1, wherein the application tier includes a user management function for providing user management functionality to the web tier.

11. (Previously Presented) The system of claim 1, further comprising a database tier coupled to the web tier or the application tier and configured to persist data, store objects or store tables.

12. (Previously Presented) The system of claim 11, wherein the web tier or the application tier is configured to generate custom tables to extend a schema of tables.

13. (Previously Presented) The system of claim 12, wherein the web tier or the application tier is configured to map the custom tables to the extended software objects or the custom software objects.

14. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to an order domain configured to support an order class.

15. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a fulfillment status domain configured to provide order fulfillment functionality.

16. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a move, change or disconnect (MCD) domain configured to store summary information of operational support system (OSS) order entry and status applications.

17. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to an order activity domain configured to carry out business logic or application logic for order management events involving persistence, transaction-sensitive data retrieval or specialized business logic.

18. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a helpers domain configured to create domain objects, perform specialized business logic or perform persistence of domain objects.

19. (Previously Presented) The system of claim 1, wherein the extended software objects or the custom software objects belong to a customer support domain configured to provide storage for information needed to retrieve an appropriate set of contact information for back office personnel.

20. (Previously Presented) A method for providing software integration for on-line procurement of telecommunications offerings, comprising:

receiving a request or a user action from a web server in a web tier;

performing order management, online ordering or user management functions in an application tier;

extending software objects from general-purpose software objects in the web tier or the application tier to support procuring of the telecommunications offerings on-line; and

creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line.

21. (Previously Presented) The method of claim 20, further comprising reconfiguring software objects that are included in the web tier and that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.

22. (Previously Presented) The method of claim 20, further comprising creating custom objects that are included in the web tier and that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.

23. (Previously Presented) The method of claim 20, further comprising reconfiguring software objects that are included in the application tier and that include reconfigured JavaServer Pages (JSPs), reconfigured transition policies, or reconfigured display objects.

24. (Previously Presented) The method of claim 20, further comprising creating custom objects that are included in the application tier and that include custom JavaServer Pages (JSPs), custom transition policies, or custom display objects.

25. (Previously Presented) The method of claim 20, further comprising including in the web tier a back office portal including the custom software objects and providing to the web server context-sensitive contact information, callback forms, help center information, or requests for inventory.

26. (Previously Presented) The method of claim 20, further comprising including in the web tier a customer portal including the extended software objects and configured to provide to the web server customer order information, customer support information, or customer order status information.

27. (Previously Presented) The method of claim 20, further comprising including in the application tier an order management function for providing to the first layer context-sensitive contact information, callback forms, help center information, or requests for inventory.

28. (Previously Presented) The method of claim 20, further comprising including in the application tier an online ordering function for providing online ordering functionality to the web tier.

29. (Previously Presented) The method of claim 20, further comprising including in the application tier a user management function for providing user management functionality to the web tier.

30. (Previously Presented) The method of claim 20, further comprising persisting data, storing objects or storing tables in a database tier coupled to the web tier or the application tier.

31. (Previously Presented) The method of claim 30, further comprising generating custom tables to extend a schema of tables in the web tier or the application tier.

32. (Previously Presented) The method of claim 31, further comprising mapping the custom tables to the extended software objects or the custom software objects in the web tier or the application tier.

33. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in an order domain to support an order class.

34. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a fulfillment status domain to provide order fulfillment functionality.

35. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a move, change or disconnect (MCD) domain to store summary information of operational support system (OSS) order entry and status applications.

36. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in an order activity domain to carry out business logic or application logic for order management events involving persistence, transaction-sensitive data retrieval or specialized business logic.

37. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a helpers domain to create domain objects, perform specialized business logic or perform persistence of domain objects.

38. (Previously Presented) The method of claim 20, further comprising configuring the extended software objects or the custom software objects in a customer support domain to provide storage for information needed to retrieve an appropriate set of contact information for back office personnel.

39. (Previously Presented) A computer-readable medium storing computer-executable instructions for performing the steps recited in claim 20.

40. (Previously Presented) A system for providing software integration for on-line procurement of telecommunications offerings, comprising:

means for receiving a request or a user action from a web server in a web tier;

means for performing order management, online ordering or user management functions in an application tier;

means for extending software objects from general-purpose software objects in the web tier or the application tier to support procuring of the telecommunications offerings on-line; and

means for creating custom software objects in the web tier or the application tier to support the procurement of the telecommunications offerings on-line.

X. EVIDENCE APPENDIX

Appellants are unaware of any evidence that is required to be submitted in the present Evidence Appendix.

XI. RELATED PROCEEDINGS APPENDIX

Appellants are unaware of any related proceedings that are required to be submitted in the present Related Proceedings Appendix.